

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0091707

Effective Date: April 14, 2009 Expiration Date: April 13, 2014

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit as set forth herein.

Owner: County of Amelia

Facility Name: Amelia Courthouse Sanitary District STP - Smacks

Creek

County: Amelia

Facility Location: Intersection of Smacks Creek and Route 627

The owner is authorized to discharge to the following receiving stream:

Stream: Smacks Creek

River Basin: Appomattox River

River Subbasin: NA

Section: 5c Class: III

Special Standards: NEW-2

Deputy Regional Director, Department of Environmental Quality

Date

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

DISCHARGE MONITORING REPORT(DMR)

Amelia Courthouse Sanitary District STP

NAME

ADDRESS PO BOX A Amelia

VA 23002

 $\begin{tabular}{l} FACILITY \\ LOCATION \\ \hline \end{tabular} Southwest intersection of Smacks Creek and SR627 \\ \hline \end{tabular}$

FROM

MONITORING PERIOD 001 PERMIT NUMBER VA0091707 Q N YEAR

DISCHARGE NUMBER YEAR MO DAY 2 DAY

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

04/09/2009

Municipal Major

Piedmont Regional Office

4949-A Cox Road

VA 23060 Glen Allen NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

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PARAMETER		QUANTII	QUANTITY OR LOADING		0	QUALITY OR CONCENTRATION	ICENTRATION		g Ž	FREQUENCY	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	1 Y P E
001 FLOW	REPORTD				*****	*****	****				
	REGRMNT	666.0	ML	MGD	****	******	****			CONT	TIRE
002 PH	REPORTD	****	****			*****					
	RECHMINT	*****	**************************************		6.0	*****	0.6	SU		1/DAY	GRAB
004 TSS	REPORTD				****						
	RECHMINT	110	170	KG/D	*****	30	45	MG/L		1/M	8HC
120 E.COLI	REPORTD	*****	*****		*****		*****				
	REGRMNT	******	*****		****	126	****	N/CML		3D/W	GRAB
358 AMMONIA, AS N DEC-APR	REPORTD	***	*****		****						
	RECHMINT	******	******		****	2.6	3.5	MG/L		3D/W	GRAB
360 DO, DEC-APR	яЕРОЯТВ	*****	****			****	******				
	REGRMNT	*****	*****		8.0	****	*****	MG/L		1/DAY	GRAB
383 AMMONIA, AS N MAY-NOV	REPORTD	*****	*****		*****						
	REGRIMIT	*****	****		****	0.63	0.86	MG/L		3D/W	GRAB
418 CBOD5, MAY-NOV	REPORTD				****						
	REGRIMIT	19	2.8	KG/DX	****	2.0	7.5	MG/L		3D/W	8HC
STABLARACO DO STABLARACIO DE TARACIO PARACIPARA	CAMACACTO										

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

				MO. DAY					7			
	DATE			Š					Ç#	<u>`</u>		
	DAT			YEAR					VEAD	<u> </u>		
				CERTIFICATE NO.	TEI EPHONE							
	OPERATOR IN RESPONSIBLE CHARGE			SIGNATURE	ER OR AUTHORIZED AGENT				SIGNATIBE			
				TYPED OR PRINTED NAME	PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				TYPEN OR PRINTED NAME			
	TOTAL BOD5(K.G.)		APPROGRAMMENTS MERRE	PERFORMED INDICATION OF THE STATE OF ST	NO 1535042 THAT GOVERN THE PERSONNEL FAREFARM WITHER AND EVALUATE THE THEORYGINAN SUBMITTED. RASED ON MY INQUIRY OF THE PERSON OR PFRSONS WHI MANAGE THE SYSTEM OR	THOSE PERSONS DERECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION	SUIMITITID IS TO THE BEST OF MY KNONLEXSE AND BELIEF TRUE, ACCURATE AND COMPLETE.	I AM AMARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION,	INCLUDING THE POSSIBLETY OF FINE AND PAPATSOMMENT FOR KNOWING VIOLATIONS. SEE 18	e statutes may include	fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	
	TOTAL FLOW(M.G.)		I CHRELIA INDER PENALTY OF LAN TRAF TRAF IN XXIIMENT LAIL APPACHMENTS WERE	PERPARED INDICATE AND UNKERTION OF SUPERVISION FOR ACCORDANCE WITH A SYSTEM DISIGNAD ON A REPORT AND A SYSTEM DISIGNAD.	IE PERSON OR PERSONS WE	FOR GATHERING THE INFO	ENGE AND BELIEF TRUE,	NT PENALITIES FOR SUBMIT	WE PRINCEONMENT FOR KIN	U.S.C. & 1001 AND 33 U.S.C. & 1319. (Penallies under these statutes may include	imprisonment of between	
	TOTAL OCCURRENCES		PENALTY OF LAB TRAT	MY DIRECTION OR SUPER	ID ON MY INQUIRY OF TH	WERECTLY RESPONSIBLE 1	THE BEST OF MY KNOW!	THERE AKE SIGNIFICAL	OSSIBILITY OF FINE AL	MD 33 U.S.C. & 1319.), GOO and/or maximum .	
	BYPASSES AND	OVERFLOWS	REGINII VAITANATA I	PREPARED IMDER	SUBMITTED, RASE	THOSE PERSONS D	SUIMITTIMIDS	I AM AWARE THAT	INCLUDING THE PA	U.S.C. & 1001 A	fines up to \$10	

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

DISCHARGE MONITORING REPORT(DMR)

Amelia Courthouse Sanitary District STP VA 23002

ADDRESS PO BOX A

NAME

FACILITY Southwest intersection of Smacks Creek and SR627 LOCATION Amelia

DISCHARGE NUMBER DAY YEAR MO MONITORING PERIOD 001 ٥ MO DAY PERMIT NUMBER VA0091707 YEAR

FROM

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

04/09/2009

Municipal Major

Piedmont Regional Office 4949-A Cox Road

VA 23060 Glen Allen NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		DUANTI	QUANTITY OR LOADING		0	QUALITY OR CONCENTRATION	CENTRATION		ġì	FREQUENCY	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS	IFF
419 CBOD5, DEC-APR	REPORTD				*****						
	RECRMNT	26	39	KG/D	****	7.0	10.0	MG/L		3D/W	8НС
420 TKN, MAY-NOV	REPORTD				****						
	RECHMINT	11	4.1	KG/D	*****	3.0	4.5	MG/L		3D/W	8НС
421 DO, MAY-NOV	REPORTD	****	****			*****	******				
	REGRMNT	****	*****		6.9	*****	******	MG/L		1/DAY	GRAB
627 TKN, DEC-APR	REPORTD				*****						
	REGRMNT	23	34	KG/D	****	0.9	0.6	MG/L		3D/W	8нс
803 NITROGEN, TOTAL -	REPORTD	****	*****		****		*****				
ANNUAL AVERAGE (MG/L)	RECHMINT	****	****		***	3.0	****	MG/L		1/YR	CALC
805 NITROGEN, TOTAL (AS	яЕРОЯТВ	******	****		******		* * * * * * *				
N) (YEAR-TO-DATE)	RECHMINT	****	******		*****	NL,	******	MG/L		1/M	CALC
806 PHOSPHORUS, TOTAL (AS	REPORTD	****	******		*****		****				
P) (YEAR-TO-DATE)	REGRIMINT	****	****		****	NE	****	MG/L		1/M	CALC
811 PHOSPHORUS, TOTAL -	REPORTD	****	****		*****		***				
ANNUAL AVERAGE (MG/L)	RECRMNT	******	*****		****	0:30	*****	MG/L		1/YR	CALC

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

		MÖ.			MO.
DATE		YEAR			YEAR
		CERTIFICATE NO.	TELEPHONE		
OPERATOR IN RESPONSIBLE CHARGE		SIGNATURE	R OR AUTHORIZED AGENT		SIGNATURE
OPERATOR IN R		TYPED OR PRINTED NAME	THE PRESENT BEST OF THE PERSON		TYPED OR PRINTED NAME
TOTAL BOD5(K.G.)		I CERELFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL AFFIACIMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACTORDANCE WITH A SYSTEM DESLICIED OF ASSENCE MARKE MAD STATEM DIRECTION OF SUPERVISION IN ACTORDANCE WAS TAKEN FOR THE TABLEMANT WAS ASSENTED.	SUBMITTED. BASE ON HITE TRADITION OF THE PERSON ON PERSONS WILL MANAGE THE SUBMITTED AND THE PERSON ON PERSONS WILL INVOKABATION. THE INVOKABATION OF THE INVOKABATION OF THE INVOKABATION OF THE INVOKABATION OF THE INVOKABATION.	SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELLEF TRUE, ACCURATE AND COMPLETE. I AM AMARE THAT THERE ARE SIGNIFICANT DENALTIES FOR SUBMITTING FALSE INFORMATION,	INTIJIDIN; THE POSSIBILITY DF FINE AND CMPRISONMENT FOR ICNOWING VIOLATIONS. SEE 18 U.S.L. & 1001 AND 33 U.S.C. & 1419. (Penalties under these statutes may include fines up Lo S10,000 and/or maximum imprisonment of between 6 months and 5 years.)
TOTAL FLOW(M.G.)		CERCIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE REPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNATION OF SUPERVISION IN ACCORDANCE MAD PUBLISHED THE INNOVAMENTATION ASSETTING THE ANALYSIS OF THE THEORY WAS ASSETTING THE THEORY OF THE THEORY WAS ASSETTING THE THEORY OF THE THEORY WAS ASSETTING THE THEORY WAS ASSETTING THE THEORY OF THE THEORY WAS ASSETTING THE THEORY OF THE THEORY WAS ASSETTING THE THE THEORY WAS ASSETTING THE THE THEORY WAS ASSETTING THE THE THEORY WAS ASSETTING THE THEORY WAS ASSETTING THE THEORY WAS ASSETTING THE WAS ASSETTING THE THEORY WAS ASSETTING THE THEORY WAS ASSETTING THE WAS	TE PERSON OR PERSONS W	LEIKE AND BELLEF PRUE, VIT PENALTIES FOR SUBMI	INCLUDINT THE POSSIBILITY OF FINE AND OMPRISONMEAUT FOR IGNORING VIOLATIONS. J.S.C. & 1001 AND 33 U.S.C. & 1319. (Penalties under these statutes may inc. fines up Lo \$10,000 and/or maximum imprisonment of between 6 months and 5 y
TOTAL		PENALTY OF LAW THAT MY DIRECTION OR SUPER	D ON MY INQUIRY DE THE INSTITUTE OF THE PROCESSION OF THE PROCESSI	THE BEST OF MY KNOWI THERE ARE SIGNIFICAN	OSSIBILITY DE FINE AL ND 33 U.S.C. & 1519. ,000 and/or muxjmum i
BYPASSES	OVERFLOWS	I CEMPLEY UNDER PREPARED UNDER 1	SUBMITTED, BASE THOSE PERSONS D	SUBMITTED IS TO 1 AM AWARE THAT	INTLUDING THE P U.S.C. & 1001 A fines up to \$10

DAY

DAY

THIS REPORT IS REQUIRED BY LAW (33 U. S. C. § 1318 40 CFR 122.41(I)(4)(I)). FAILURE 10 REPOR1 OH PAILURE 10 HEPOR1 IHUIHFULLY CAN RESULT IN CIVIL PENALTIES NOT TO EXCEED \$10,000 PER DAY OF VIOLATION: OR IN CRIMINAL PENALTIES NOT TO EXCEED \$25,000 PER DAY OF VIOLATION OR BY IMPRISONMENT FOR NOT MORE THAN FIVE YEARS, OR BOTH.

GENERAL INSTRUCTIONS

- Complete this form in permanent ink or indelible pencil.
- Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
- For those parameters where the "permit requirement" spaces are blank or a limitation appears, provide data in the "reported" spaces in accordance with your permit.
- Enter the average and, if appropriate, maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading" KG/DAY = Concentration(mg/l) x Flow(MGD) x 3.785 4
- Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration". 'n
- Enter the number of samples which do not comply with the maximum and /or minimum permit requirements in the "reported" space in the column Ġ.
- Enter the actual frequency of analysis for each parameter (number of times per day, week, month) in the "reported" space in the column marked 'Frequency of Analysis"
- Enter the actual type of sample collected for each parameter in the "reported" space in the column marked "Sample Type' œ
- Enter additional required data or comments in the space marked "additional permit requirements or comments". o
- Record the number of bypasses during the month, the total flow in million gallons and BOD5 in kilograms in the proper columns in the section marked "Bypasses and Overflows". 5.
- The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator, the operator's certificate number should be reported in the space provided 7
- The principal executive officer should then review the form and sign in the space provided and provide a telephone number where he/she can be 넏
- You are required to sample at the frequency and type indicated in your permit. 13
- Send the completed form to your Dept. of Environmental Quality Regional Office by the 10th of each month. 14,
- 15. You are required to retain a copy of the report for your records.
- Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each violation by date. 5.
- If you have any questions, contact the Dept. of Environmental Quality Regional Office. 17.

A. Limitations and Monitoring Requirements

- Upon the issuance of the Certificate to Operate for the 0.999 MGD facility and lasting until the issuance of the Certificate to Operate for the 2.0 or 3.0 MGD facility or until the permit's expiration date, whichever occurs first, the permittee is authorized to discharge from outfall number 001.
- Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below: ત્વં

SOLTSIGETON TIME FEET			DISCHARGE	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	UIREMENTS
	MONTHLY AVERAGE	AVERAGE	WEEKLY	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) ⁽¹⁾	Z		A DATE OF THE PROPERTY OF THE	NA	NA	NL	Continuous	Totalizing, Indicating, and Recording
pH (standard units)	NA	4	_	NA	6.0	0.6	1/Day	Grab
E. coli (N/100 mL)	126	9	4	NA	NA	N	3 Days/Week Between 10AM and 4PM	Grab
Total Suspended Solids (TSS)	30 mg/L ⁽²⁾	110 kg/d ⁽²⁾	45 mg/L	170 kg/d ⁽²⁾	NA	NA	1/Month	8 HC
cBOD₅ (May – Nov)	5.0 mg/L	19 kg/d	7.5 mg/L	28 kg/d	NA	ΑN	3 days/week	8 HC
cBOD ₅ (Dec – Apr)	7.0 mg/L	26 kg/d	10 mg/L	39 kg/d	NA	NA	3 days/week	8 HC
Total Kjehldahi Nitrogen (as N) (May – Nov)	3.0 mg/L	11 kg/d	4.5 mg/L	17 kg/d	NA	NA	3 days/week	8 HC
Total Kjehldahl Nitrogen (as N) (Dec – Apr)	6.0 mg/L	23 kg/d	9.0 mg/L	34 kg/d	ΑN	MA	3 days/week	8 HC
Total Nitrogen – Annual Average (3.4.5)	3.0 mg/L	ng/L	_	AN	N A	NA	1/Year	Calculated
Total Nitrogen - Year to Date Monthly Average (3.43)	N			NA	NA	NA	1/Month	Calculated
Total Phosphorus (as P) – Annual Average	0.30 mg/L	mg/L		ΑN	Ϋ́	NA	1/Year	Calculated
Total Phosphorous (as P) – Year to Date Monthly Average	N			ΝΑ	NA	NA	1/Month	Calculated
Dissolved Oxygen (May – Nov)	NA	٨	_	NA	6.9 mg/L	NA	1/Day	Grab
Dissolved Oxygen (Dec – Apr)	N	A	_	NA	8.0 mg/L	NA	1/Day	Grab
Ammonia as Nitrogen (May – Nov)	0.63 mg/L	ng/L	0.86	0.86 mg/L	¥ Z	MA	3 days/week	Grab
Ammonia as Nitrogen (Dec – Apr)	2.6 mg/L	ng/L	3.5	3.5 mg/L	AA	NA	3 days/week	Grab

"NL" means no limitation is established. Monitoring and reporting however are required.

"NA" means not applicable.

- The design flow of this treatment facility is 0.999 MGD. See Part I.C.1 for additional flow requirements.
- The limitations are expressed in two significant digits. In addition to any Total Nitrogen and Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, this haddition to any Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under Registration Number VAN040105, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. See Part I.C. 14 and 15 for nutrient reporting requirements

 Total Nitrogen, which is the sum of TKN and Nitrite, shall be derived from the results of those tests. E@@

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- There shall be no discharge of floating solids or visible foam in other than trace amounts. At least 85% removal for TSS and $cBOD_{\delta}$ must be attained for this effluent.
- Monitoring and reporting are not required until commencement of this discharge. See Part I.C.13 for notification requirement. خ ن خ

A. Limitations and Monitoring Requirements

- Upon the issuance of the Certificate to Operate for the 2.0 MGD facility and lasting until the issuance of the Certificate to Operate for the 3.0 MGD facility or until the permit's expiration date, whichever occurs first, the permittee is authorized to discharge from outfall number 001. ς;
- Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below: તાં

			DISCHARGE LIMITATIONS	LIMITATIONS			MONITORING REQUIREMENTS	JIREMENTS
EFFLUENT CHARACTERISTICS	MONTHLY	MONTHLY AVERAGE	WEEKLY,	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) ⁽¹⁾	Z	IV.	Z	NA	AA	٦Ľ	Continuous	Totalizing, Indicating, and Recording
pH (standard units)	Z	NA	Z	NA	6.0	0.6	1/Day	Grab
E. coli (N/100 mL)	A	126	No. 100 to 100 t	NA	NA	NA	5 Days/Week Between 10AM and 4PM	Grab
Total Suspended Solids (TSS)	30 mg/L ⁽²⁾	230 kg/d ⁽²⁾	45 mg/L	340 kg/d ⁽²⁾	AN	NA	1/Month	24 HC
cBOD ₅ (May - Nov)	5.0 mg/L	38 kg/d	7.5 mg/L	57 kg/d	NA	NA	5 Days/Week	24 HC
cBOD ₅ (Dec – Apr)	6.0 mg/L	45 kg/d	9.0 mg/L	68 kg/d	NA	NA	5 Days/Week	24 HC
Total Kjehldahl Nitrogen (as N) (May – Nov)	3.0 mg/L	23 kg/d	4.5 mg/L	34 kg/d	NA	AN	5 Days/Week	24 HC
Total Kjehldahl Nitrogen (as N) (Dec – Apr)	5.0 mg/L	38 kg/d	7.5 mg/L	57 kg/d	AM	NA	5 Days/Week	24 HC
Total Nitrogen - Annual Average (3.4.5)	3.0 г	3.0 mg/L	Z	NA	¥	AN	1/Year	Calculated
Total Nitrogen – Year to Date Monthly Average (3,45)	Z	N	Z	NA	Ϋ́	NA	1/Month	Calculated
Total Phosphorus (as P) – Annual Average (3.4)	0:30	0.30 mg/L	Z	NA	Ϋ́	ΝΑ	1/Year	Calculated
Total Phosphorous (as P) – Year to Date Monthly Average	Z	N	Z	NA	Ϋ́	NA	1/Month	Calculated
Dissolved Oxygen (May – Nov)	Z	NA	Z	NA	7.3 mg/L	NA	1/Day	Grab
Dissolved Oxygen (Dec – Apr)	Z	NA	Z	NA	7.9 mg/L	N	1/Day	Grab
Ammonia as Nitrogen (May - Nov)	0.53	0.53 mg/L	0.67	0.67 mg/L	Ā	A	5 Days/Week	Grab
Ammonia as Nitrogen (Dec Apr)	1.8.1	.8 mg/L	2.2	2.2 mg/L	AA	NA	5 Days/Week	Grab

"NL" means no limitation is established. Monitoring and reporting however are required.

"NA" means not applicable.

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- The design flow of this treatment facility is <u>2.0</u> MGD. See Part I.C.1 for additional flow requirements.
 The design flow of this treatment facility is <u>2.0</u> MGD. See Part I.C.1 for additional flow requirements.
 The limitations are expressed in two significant digits.
 In addition to any Total Nitrogen and Total Phosphorus concentration limits (or monitoring requirements without associated fimits) listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under Registration Number VAN040105, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.
 See Part I.C.14 and 15 for nutrient reporting requirements.
 Total Nitrogen, which is the sum of TKN and Nitrate plus Nitrite, shall be derived from the results of those tests.

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- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- At least 85% removal for TSS and cBOD₅ must be attained for this effluent. တ်ပော်
- Monitoring and reporting are not required until commencement of this discharge. See Part I.C.13 for notification requirement.

A. Limitations and Monitoring Requirements

- During the period beginning with the issuance of the Certificate to Operate for the 3.0 MGD facility and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall number 001.
- Such discharges shall be limited and monitored at Outfall 001 by the permittee as specified below:

SOLF SIGNED AND THE BEST OF TH			DISCHARG	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	UIREMENTS
	MONTHLY AVERAGE	AVERAGE	WEEKL	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) ⁽¹⁾	N	-1		NA	NA	٦	Continuous	Totalizing, Indicating, and Recording
pH (standard units)	Z	NA		NA	6.0	0.6	1/Day	Grab
E. coli (N/100 mL)		126		VΑ	ΑN	ΑN	1/Day Between 10AM and 4PM	Grab
Total Suspended Solids (TSS)	30 mg/L ⁽²⁾	340 kg/d ⁽²⁾	45 mg/L	510 kg/d ⁽²⁾	NA	AN	1/Month	24 HC
cBOD₅ (May – Nov)	5.0 mg/L	57 kg/d	7.5 mg/L	85 kg/d	NA	NA	1/Day	24 HC
cBOD ₅ (Dec – Apr)	6.0 mg/L	68 kg/d	9.0 mg/L	100 kg/d ⁽²⁾	NA	NA	1/Day	24 HC
Total Kjehidahl Nitrogen (as N) (May – Nov)	3.0 mg/L	34 kg/d	4.5 mg/L	51 kg/d	NA	NA	1/Day	24 HC
Total Kjehldahl Nitrogen (as N) (Dec – Apr)	5.0 mg/L	57 kg/d	7.5 mg/L	85 kg/d	AN	NA	1/Day	24 HC
Total Nitrogen – Annual Average ^(3,4,5)	3.0 mg/L	J/bu	Amademak debiharkana tek tahun ake debumb tek	MA service or service	AN A MANAGEMENT OF THE PARTY OF	M M	1/Year	Calculated
Total Nitrogen - Year to Date Monthly Average (343)	Z			Z	A A	٧×	1/Month	Calculated
Total Phosphorus (as P) – Annual Average	0.30 mg/L	mg/L		NA	NA	NA	1/Year	Calculated
Total Phosphorous (as P) – Year to Date Monthly Average	NF	7		NA	NA	NA	1/Month	Calculated
Dissolved Oxygen (May – Nov)	NA	A	TO THE STATE OF TH	NA	7.3 mg/L	NA	1/Day	Grab
Dissolved Oxygen (Dec – Apr)	A	WA Commence of the commence of		NA	8.2 mg/L	AN	1/Day	Grab
Ammonia as Nitrogen (May - Nov)	0.49 mg/L	mg/L	0.5	0.59 mg/L	NA 	NA	1/Day	Grab
Ammonia as Nitrogen (Dec – Apr)	1.4 mg/L	ng/L	~	1.7 mg/L	NA	NA	1/Day	Grab

"NL" means no limitation is established. Monitoring and reporting however are required.

"NA" means not applicable.

- The design flow of this treatment facility is 3.0 MGD. See Part I.C.1 for additional flow requirements. =ଉଡ
- The limitations are expressed in two significant digits. In addition to any Total Nitrogen and Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the Chegistration List under Registration Number VAN040105, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia. See Part I.C.14 and 15 for nutrient reporting requirements.

 Total Nitrogen, which is the sum of TKN and Nitrate plus Nitrite, shall be derived from the results of those tests.

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- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- At least 85% removal for TSS and cBOD₅ must be attained for this effluent. ت ن ت
- Monitoring and reporting are not required until commencement of this discharge. See Part I.C.13 for notification requirement.

Permit No. VA 0091707 Part I Page 7 of 17

B. <u>Alternative Disinfection - Total Residual Chlorine (TRC) Effluent Limitations and Monitoring Requirements</u>

If chlorination is chosen as a disinfection method, TRC [DMR #005] shall be limited and monitored by the permittee as specified below:

1. <u>Effluent TRC</u>, following dechlorination, shall be limited as specified below:

Permit Limit Effective Period	Monthly Average (ug/l)	Weekly Average (ug/l)
Upon issuance of a Certificate to Operate a 0.999 MGD facility and lasting until the issuance of the Certificate to Operate for the 2.0 or 3.0 MGD facility or until the permit's expiration date, whichever occurs first	2.1	2.5
Upon issuance of the Certificate to Operate for the 2.0 MGD facility and lasting until the issuance of the Certificate to Operate for the 3.0 MGD facility or until the permit's expiration date, whichever occurs first	2.0	2.4
Upon issuance of the Certificate to Operate for the 3.0 MGD facility and lasting until the permit's expiration date	2.0	2.4

2. TRC shall be monitored at the outlet of each operating chlorine contact tank, prior to dechlorination, by grab sample as specified below:

Permit Limit Effective Period	Contact Tank Monitoring Frequency
Upon issuance of a Certificate to Operate a 0.999 MGD facility and lasting until the issuance of the Certificate to Operate for the 2.0 or 3.0 MGD facility or until the permit's expiration date, whichever occurs first	3/Day at 4 Hr intervals
Upon issuance of the Certificate to Operate for the 2.0 MGD facility and lasting until the issuance of the Certificate to Operate for the 3.0 MGD facility or until the permit's expiration date, whichever occurs first	4/Day at 4 Hr intervals
Upon issuance of the Certificate to Operate for the 3.0 MGD facility and lasting until the permit's expiration date	Once every 2 Hr

3. For any one calendar month, the number of samples taken at the outlet of the chlorine contact tank that are less than 1.0 mg/l shall be no more than as specified in the table, below [DMR #157]:

Permit Limit Effective Period	Number of Samples less than 1.0 mg/l per month
Upon issuance of a Certificate to Operate a 0.999 MGD facility and lasting until the issuance of the Certificate to Operate for the 2.0 or 3.0 MGD facility or until the permit's expiration date, whichever occurs first	9
Upon issuance of the Certificate to Operate of the 2.0 MGD facility and lasting until the issuance of the Certificate to Operate for the 3.0 MGD facility or until the permit's expiration date, whichever occurs first	12
Upon issuance of the Certificate to Operate for the 3.0 MGD facility and lasting until the permit's expiration date	36

4. No TRC sample collected at the outlet of the chlorine contact tank, prior to dechlorination, shall be less than 0.60 mg/l. [DMR #213]

C. Other Requirements and Special Conditions

- 1. 95% Capacity Reopener A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Department of Environmental Quality's Piedmont Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.
- 2. **Indirect Dischargers** The permittee shall provide adequate notice to the Department of the following:
 - a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
 - b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

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Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

- 3. CTC, CTO Requirement The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit. Upon issuance of a CTO, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology listed in the CTO. Upon issuance of a CTO, any nutrient removal facilities installed shall be operated to achieve design effluent levels
- 4. Operation and Maintenance Manual Requirement The permittee shall develop an Operations and Maintenance (O & M) Manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. The manual shall be submitted to the DEQ Regional Office for approval within 90 days of completion of construction. The permittee shall operate the treatment works in accordance with the approved O & M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:
 - a. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);
 - b. Discussion of Best Management Practices, if applicable;
 - Treatment works design; treatment works operation, routine preventive maintenance of units within the treatment works, critical spare parts inventory and record keeping;
 - d. A plan for the management and/or disposal of waste solids and residues.
 - e. Procedures for handling, storing, and disposing of all waste, fluids, and pollutants characterized in Part I.B.5. below that will prevent these materials from reaching state waters.
 - f. Procedures for measuring and recording the duration and volume of treated wastewater discharged.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

- 5. Materials Handling/Storage Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.
- 6. Licensed Operator Requirement The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the

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Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

- 7. Reliability Class The permitted treatment works shall meet Reliability Class II.
- 8. Reopener This permit may be modified or, alternatively, revoked and reissued:
 - a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;
 - b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade, or
 - To incorporate alternative nutrient limitations and/or monitoring requirements, should:
 - the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
 - a future water quality regulation or statute require new or alternative nutrient control.
 - d. If any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.
- 9. New Source Monitoring The permittee shall monitor the effluent at outfall 001 for the substances noted in the following documents according to the indicated analysis number, quantification level, sample type and frequency:
 - a. Attachment A, "Water Quality Criteria Monitoring"
 - b. Form 2A, Part B.6, Effluent Testing Data
 - c. Form 2A, Part D, Expanded Effluent Testing Data

Monitoring shall be within 180 days after the issuance of the 0.999 MGD CTO. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A, Form 2A Part B.6, or D.

10. Compliance Reporting

a. The maximum quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
cBOD ₅	5 mg/l
TSS	1.0 mg/l
Total Kjehldahl Nitrogen	0.5 mg/l
Ammonia-N	0.20 mg/l

b. Reporting:

Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL, then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is <QL, then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

- c. Any single datum required shall be reported as "<QL" if it is less than the QL in a above. Otherwise the numerical value shall be reported.
- d. Significant Digits -- The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
- e. The compliance reporting calculations outlined in I.C.10.b above shall apply only to parameters not addressed in I.C.14, Nutrient Reporting Calculations.
- 11. **Sludge Use and Disposal** The Sludge Management Plan (SMP) is conditionally approved with the issuance of this permit, provided that a complete SMP is submitted and approved prior to implementation of the specific sludge use or disposal practices. Upon approval, the SMP becomes an enforceable part of the permit. The permit may

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be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by the chosen sewage sludge use or disposal practices.

12. Industrial Pretreatment Program/Significant Discharger Survey

- a. Within 180 days of commencing discharge, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.
- b. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office, within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users* discharging wastewater to the treatment works.
- c. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with (a) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in (d) below may be suspended by the DEQ.
- d. The approvable pretreatment program submission shall at a minimum contain the following parts:
 - (1) Legal authority,
 - (2) Program procedures,
 - (3) Funding and resources,
 - (4) Local limits evaluation, and local limits if needed,
 - (5) Enforcement response plan, and
 - (6) List of Significant Industrial Users.
- e. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:
 - (1) An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.
 - (2) A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
 - (3) A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
 - (4) All information concerning any interference, upset, VPDES permit or Water Quality standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.

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- (5) A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
- (6) A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.
- (7) A summary of the permits issued to Significant Industrial Users since the last annual report.
- (8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
- (9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
- (10)Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period.
- (11)Signature of an authorized representative.
- f. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):
 - (1) If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;
 - (2) If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and
 - (3) If federal, state or local requirements change.
- g. *A significant industrial user is one that:
 - (1) Has a process wastewater (**) flow of 25,000 gallons or more per average workday;
 - (2) Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;
 - (3) Is subject to the categorical pretreatment standards; or
 - (4) Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.
 - **Excludes sanitary, non-contact cooling water and boiler blowdown.
- 13. Notification of Commencement of Discharge No later than ten days prior to commencement of the discharge from the facility, the permittee shall submit written notification to the Piedmont Regional Office which provides the first day of discharge.

14. Nutrient Reporting Calculations

For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formulae:

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$$AC_{avg}$$
-YTD = $(\sum_{(Jan-current month)} MC_{avg}) \div (\# of months)$

where:

 AC_{avg} -YTD = calendar year-to-date average concentration (mg/L)(parameter codes 805 and 806)

 MC_{avg} = monthly average concentration (mg/L) as reported on the Nutrient General Permit DMR

The total nitrogen and phosphorus average concentrations (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10th of the following year. These values shall be calculated in accordance with the following formulae:

$$AC_{avg} = (\sum_{(Jan-Dec)} MC_{avg}) \div 12$$

where:

 AC_{avg} = calendar year average concentration (mg/L) (parameter codes 792 and 794) MC_{avg} = monthly average concentration (mg/L) as reported on the Nutrient General Permit DMR

For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

- 15. Suspension of Annual Average Concentration Limitations for E3/E4 Facilities
 The annual average concentration limitations for Total Nitrogen and/or Total
 Phosphorus are suspended during any calendar year in which the facility is
 considered by DEQ to be a participant in the Virginia Environmental Excellence
 Program in good standing at either the Exemplary Environmental Enterprise (E3)
 level or the Extraordinary Environmental Enterprise (E4) level, provided that the
 following conditions have also been met:
 - a. The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;
 - b. The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations, and
 - c. The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.

The annual average concentration limitations for Total Nitrogen and/or Phosphorus, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by 15.b. above.

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- 16. **Nutrient Offset Requirements** Any aggregate annual Total Nitrogen and/or Total Phosphorus loadings above and beyond those permitted prior to July 1, 2005 shall be offset subject to a DEQ-approved trading contract prepared in accordance with §62.1-44.19:12 :19 of the Law and 9 VAC 25-820-10 et seq., and which includes, but is not limited to the following:
 - a. Discussion of the source of the acquired allocations,
 - b. Discussion of other permitted facilities involved in the trade, and
 - c. Discussion of any non-point source allocations acquired.

This proposal shall provide for the waste loads that are projected to be discharged on an annual basis for the term of this permit, and shall be approved prior to issuance of a Certificate to Construct for the new or expanded facility. Once approved, the conditions of the proposal pertaining to verification of nonpoint allocations acquired, or self-offsetting practices implemented, become an enforceable part of this permit.

- 17. Reuse/Reclamation Re-opener The Board may be modified or, alternatively, revoked and reissued to incorporate reuse and reclamation activities to offset the annual Total Nitrogen and/or Total Phosphorus loadings.
- 18. Facility Closure If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Treatment, removal and final disposition of residual wastewater and solids; removal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. The permittee may continue discharging until the effluent no longer meets the permit limits, the permit expires, or the permit is terminated, whichever occurs first.

D. Whole Effluent Toxicity Testing

1. Biological Monitoring

a. In accordance with the schedule in Part 1.D.2. below and commencing within three months of the issuance of a CTO for the 0.999 MGD facility, the permittee shall conduct quarterly acute and chronic toxicity tests for a period of three years or until expiration of this permit, whichever occurs first, using 24-hour flowproportioned composite samples of final effluent from outfall 001. The acute multi-dilution NOAEC tests shall be:

48-hour static tests using *Ceriodaphnia dubia*48-hour static tests using *Pimephales promelas*

b. These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically with a minimum of 4 replicates, with 5 organisms in each, for calculation of a valid NOAEC (No Observed Adverse Effects Concentration). The NOAEC, as determined by hypothesis testing, shall be reported on the DMR.

The LC_{50} should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia Chronic 7-Day Static Renewal Survival and Growth Test using Pimephales promelas

c. These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed within the compliance period. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC₅₀ at 48 hours and the IC₂₅ with the NOEC's in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

- d. The test dilutions should be able to determine compliance with the following endpoints:
 - (1) Upon issuance of a Certificate to Operate a 0.999 MGD facility and lasting until the issuance of the Certificate to Operate for the 2.0 or 3.0 MGD facility or until the permit's expiration date, whichever occurs first:
 - i. Acute (NOAEC) = 100%; and
 - ii. Chronic (NOEC) ≥ 66% equivalent to a TU_c ≤ 1.51.
 - (2) Upon the issuance of the Certificate to Operate for the 2.0 MGD facility and lasting until the issuance of the Certificate to Operate for the 3.0 MGD facility or until the permit's expiration date, whichever occurs first:
 - i. Acute (NOAEC) of 100%; and
 - ii. Chronic (NOEC) \geq 68% equivalent to a TU_c \leq 1.47.
 - (3) During the period beginning with the issuance of the Certificate to Operate for the 3.0 MGD facility and lasting until the permit's expiration date:
 - i. Acute (NOAEC) of 100%; and
 - ii. Chronic (NOEC) \geq 68% equivalent to a TU_c \leq 1.47.
- e. The test data will be evaluated by for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is

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needed a WET limit and compliance schedule will be required and the toxicity tests of 1.a. may be discontinued.

- f. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.
- g. If after evaluating the data, it is determined that no limit is needed, the permittee shall continue acute and chronic toxicity testing (both species) of the outfall annually, as on the reporting schedule in Part 1.D.2.

2. Reporting Schedule:

The permittee shall report the results on the DMR and submit 2 copies of the toxicity tests reports specified in this Toxics Management Program in accordance with the following schedule:

- a. Submit WET test results on the DMR quarterly beginning within 6 months of commencing discharge and continuing for at least 12 quarters (3 years) or until expiration of this permit, whichever occurs first.
- b. Submit WET test results on the DMR annually until expiration of this permit after 12 quarters of monitoring if no limit is needed in accordance with Part I.D.1.g, above.

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CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

DEQ - Piedmont Regional Office 4949-A Cox Road Glen Allen, VA 23060

- 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved, or specified by the Department.
- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
- 4. Calculations for all limits which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

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D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- Otherwise alter the physical, chemical or biological properties of such state waters and
 make them detrimental to the public health, or to animal or aquatic life, or to the use of
 such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F 1; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F 1, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit. Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a

treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II 12. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part.II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office at (804) 527-5020 or fax (804) 527-5106. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or

- (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements

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- 1. Applications. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulation; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II K 1;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility

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for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

- c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing

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in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate licensed operator staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of Solids or Sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

 "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limits to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II U 2 and U 3.

2. Notice

- Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have

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been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- (3) The permittee submitted notices as required under Part II U 2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset

- An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limits if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated; and
 - c. The permittee submitted notice of the upset as required in Part II I 2.
 - d. The permittee complied with any remedial measures required under Part II S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection time unreasonable during an emergency.

X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or

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operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.

- 2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.